

What is claimed is:

- a. a first vaccine composition comprising a recombinant adenovirus vector comprising a first nucleic acid sequence encoding a first polypeptide comprising the amino acid sequence of SEQ ID NO: 1, wherein the first nucleic acid sequence is operably linked to a first promoter, and
- b. a second vaccine composition comprising a recombinant pox virus vector comprising a second nucleic acid sequence encoding a second polypeptide comprising the amino acid sequence of SEQ ID NO: 1, wherein the second nucleic acid sequence is operably linked to a second promoter;

2. The composition of claim 1, wherein the first vaccine composition is administered to the subject for priming vaccination and the second vaccine is administered to the subject for boosting administration.

3. The composition of claim 1, wherein the second vaccine composition is administered to the subject for priming vaccination and the first vaccine is administered to the subject for boosting administration.

5. The composition of claim 1, wherein the recombinant pox virus vector is a Modified Vaccinia Ankara (MVA) vector.

6. The composition of claim 1, wherein the first and second polypeptides each independently further comprise a leader sequence.

7. The composition of claim 1, wherein the first and second polypeptides each independently further comprise at least one epitope of a human papillomavirus (HPV) E2 protein.

8. The composition of claim 7, wherein the first and second polypeptides each independently comprise an HPV16 E2 protein having a deletion or mutation in the DNA binding domain of the HPV16 E2 protein.

9. The composition of claim 8, wherein the HPV16 E2 protein is fused to the N-terminus of the amino acid sequence of SEQ ID NO: 1.

- 10.** The composition of claim 8, wherein the HPV16 E2 protein is fused to the C-terminus of the amino acid sequence of SEQ ID NO: 1.

11. The composition of claim 8, wherein the first and second polypeptides each independently comprise SEQ ID NO: 3 or SEQ ID NO: 5.